

```
#####
#
# https://oeis.org/A153141 # It is not in OEIS
#
maxblock <- 5
a <- 1
for(m in 0:maxblock){
  for(k in 0:(2^m-1)){
    a[2^(m+1)+2*k] <- 2*a[2^m+k]
    a[2^(m+1)+2*k+1] <- 2*a[2^m+k] + 1
  }
  x <- 2^(m+1) # A000079
  a[x:(x+1)] <- a[(x+1):x]
}
A153141 <- a
#
# https://oeis.org/A153142 # It is not in OEIS
#
maxblock <- 5
a <- 1
for(m in 0:maxblock){
  for(k in 0:(2^m-1)){
    a[2^(m+1)+2*k] <- 2*a[2^m+k]
    a[2^(m+1)+2*k+1] <- 2*a[2^m+k] + 1
  }
  x <- 2^(m+2) - 2 # A000918
  a[x:(x+1)] <- a[(x+1):x]
}
A153142 <- a
#
# https://oeis.org/A154448 # It is not in OEIS
#
maxblock <- 5
a <- 1
for(m in 0:maxblock){
  for(k in 0:(2^m-1)){
    a[2^(m+1)+2*k] <- 2*a[2^m+k]
    a[2^(m+1)+2*k+1] <- 2*a[2^m+k] + 1
  }
  x <- (8*2^m + (-1)^m - 3)/3 # A167030
  a[x:(x+1)] <- a[(x+1):x]
}
A154448 <- a
#
# https://oeis.org/A154447 # It is not in OEIS
#
maxblock <- 5
a <- 1
for(m in 0:maxblock){
  for(k in 0:(2^m-1)){
    a[2^(m+1)+2*k] <- 2*a[2^m+k]
    a[2^(m+1)+2*k+1] <- 2*a[2^m+k] + 1
  }
  x <- (10*2^m - (-1)^m - 3)/3 # A084170
  a[x:(x+1)] <- a[(x+1):x]
}
A154447 <- a
#
# https://oeis.org/A063946
#
maxblock <- 5
a <- c(1,3,2)
for(m in 1:maxblock){
  for(k in 0:(2^m-1)){
    a[2^(m+1)+2*k] <- 2*a[2^m+k]
    a[2^(m+1)+2*k+1] <- 2*a[2^m+k] + 1
  }
}
A063946 <- a
#
#####
```

```
#####
#
# https://oeis.org/A000079
#
nmax <- 15 # by choice
A000079 <- 2^(1:nmax)
#
# https://oeis.org/A000225
#
nmax <- 15 # by choice
A000225 <- 2^(1:nmax) - 1
#
# https://oeis.org/A000975 # It is not in OEIS
#
nmax <- 15 # by choice
a <- NULL; v1 <- 1
vbase <- rep(c(0,1), nmax); vbase
for(n in 1:nmax){
  v <- c(1, vbase[1:n])
  L <- length(v)-1; a <- c(a, sum(v*2^(L:0)))
}
A000975 <- c(v1, a)
#
# https://oeis.org/A081254
#
nmax <- 15 # by choice
a <- NULL; v1 <- 1
vbase <- rep(c(1,0), nmax); vbase
for(n in 1:nmax){
  v <- c(1, vbase[1:n])
  L <- length(v)-1; a <- c(a, sum(v*2^(L:0)))
}
A081254 <- c(v1, a)
#
# https://oeis.org/A003945
#
nmax <- 15 # by choice
A003945 <- 3*2^(0:nmax)
#
# https://oeis.org/A083329
#
nmax <- 15 # by choice
A083329 <- 3*2^(0:nmax) - 1
#
#####
```